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HEALTH INFRASTRUCTURE PROGRAM

FY 2011 Annual Report

October 14, 2011
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PEPFAR Ethiopia In-Country Reporting System (IRS)

TetraTech Inc. – EHIP Program

ANNUAL PERFORMANCE REPORT

(OCTOBER 1, 2010 TO SEPTEMBER 30, 2011)

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LIST OF ACRONYMS

ACOTR	Acting Contracting Officers Technical Representative
ADA	American with Disabilities Act
A-E	Architecture and Engineering
BOQ	Bill of Quantities
CAOP	Community Awareness & Outreach Plan
CDs	Construction Documents
Chemonics AHSE	Chemonics Assistance to Health Systems Expansion
COTR	Contracting Officers Technical Reprеresentative
CRMS	Construction and Renovation Management Services
EHIP	Ethiopian Health Infrastructure Program
FMoH	Federal Ministry of Health
FSA	Field Survey Assessment
FY	Fiscal Year
GoE	Government of Ethiopia
HAPN	Health, AIDS, Population and Nutrition
HC	Health Center
HIV/AIDS	Human immunodeficiency virus/auto-immune deficiency syndrome
HPN	Health, Population and Nutrition
HSDP	Health Sector Development Program
IR	Intermediate result
M&E	Monitoring and evaluation
OHSS	Other Health Systems Strengthening
OVC	Orphans and vulnerable children
PEPFAR	President's Emergency Plan for AIDS Relief
PLWHA	People Living with HIV/AIDS
PSA	Preliminary Site Assessment
QA	Quality Assurance
RHB	Regional Health Bureau
ROM	Rough Order of Magnitude
SNNPR	Southern Nations Nationalities and Peoples Region
SO	Strategic Objective
TT	Tetra Tech
USAID	United States Agency for International Development

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INTRODUCTION

Executive Summary

As demonstrated herein, the EHIP is well on its way to achieving the overall program objective of ***sustainable health infrastructure*** for the people of Ethiopia. The following milestones and successes were reached in Year One:

- Finalization of the Health Center Facility Modified Prototype "B" Design, a new standard for health centers in Ethiopia
- Prioritization and completion of preliminary site assessments for all 92 sites, which reduced project risk and avoided costs associated with full site investigations
- Completion of field investigations for the first set of site adaptation construction design packages that address cross-cutting issues and integrate environmental mitigation and monitoring requirements
- Development of a QA Plan to standardize Construction and Renovation Management Services (CRMS) inspection and monitoring activities
- Engaging and providing training sessions to Ethiopian A-E partner firms to build local capacity and increase the quality of Ethiopian design and construction practices
- Collaboration with local Ethiopian A/E firms and the Assistance to Health Systems Expansion (AHSE) Program to leverage and enhance capacity building efforts
- Development of a CAOP, to integrate the needs of vulnerable populations into project planning, design and implementation
- Participation in health center programming and design workshops, site/reconnaissance trips, biweekly meetings and FMoH semi-annual and annual Planning Programs, to facilitate communication with USAID and health sector stakeholders
- Submission of all required deliverables, including work plans, progress reports, and a Performance Monitoring Plan (PMP), within project schedule and budget

By all indications, the EHIP's technical and management approach is on target. The program is poised for a productive Year Two and promises to make a positive, lasting impact on health care throughout the republic.

Background

This USAID FY2011 Annual Report covers the reporting period from October 1, 2010 through September 30, 2011. It is the cumulative yearly progress report for TetraTech's Task Order EDH-I-00-08-00027-00, TO AID-662-TO-11-0001; Ethiopia Health Infrastructure Program. The report highlights staffing and resources, major achievements, work activities, reports and other items completed during the 9 months of the first year of the project (December 6, 2010 to September 30, 2011) and identifies the major activities planned for the next reporting period 1 Quarter FY2012 – October 1, 2011 through December 31, 2011. It also presents the project financial status for Year One.

The period of performance for this cost plus fixed fee - completion contract is five years from the notice to proceed date of December 6, 2010 when mobilization readiness and kick-off meeting activities began in the TetraTech US Offices. The project in-country team arrived in Addis Ababa in January to establish an EHIP project office in Bole, Addis Ababa and conduct the necessary business registration processes.

The Ethiopian Health Infrastructure Program ("EHIP") provides professional Architectural and Engineering (A&E IQC) infrastructure assessment, design and quality assurance/quality control for vertical structures/civil engineering and related services to the USAID/Ethiopia Health Infrastructure Program ("Engineering Services for the USAID/Ethiopia Health Infrastructure Program"). Tetra Tech (TT) plays a key role in the EHIP through the assessment and site design/renovation of up to 300 existing health care facilities and approximately 92 proposed GoE-standard Health Centers. The work activities include the implementation of Quality Assurance (QA) and Community Awareness & Outreach Programs (CAOP) during the construction period.

The sites to be constructed, renovated or refurbished will be health facilities with high antiretroviral therapy (ART) patient loads and in areas of Ethiopia having high HIV prevalence which supports attaining the goals of the health system expansion program in Ethiopia that include increasing the number of GoE-standard Health Centers in Ethiopia from approximately 630 in 2007 to a total of 3,153. Achieving this goal will also assist in attaining the World Health Organization's goal for health facility coverage for primary health care to include service delivery to health centers serving populations of 25,000. The health system expansion program seeks to improve HIV/AIDS service and disease management services by increasing coverage at primary care service delivery facilities. These improved health facilities will support these services as well as add other clinical services that have been missing from the facilities including provisions for Infectious Disease and Emergency Care.

Guiding Principles

A-E and construction services alone cannot ensure the safety and sustainability of infrastructure. The following guiding principles and cross-cutting issues figure prominently into the EHIP project approach and will be integrated throughout the life of the project.

Collaboration There are many organizations involved in the construction and maintenance of Ethiopian health infrastructure. Proper team integration of stakeholders is a top priority. As such, the EHIP is facilitating collaboration between the Mission, the GoE, the FMoH, local governments and communities, the AHSE Program, and Chemonics, and USAID's CRMS contractor.

In Year One, this collaborative approach has streamlined implementation of the EHIP by helping project staff navigate administrative and bureaucratic environments, leverage resources and efficiently incorporate features into standard designs and QC/QA activities.

Sustainability of Health Care Facilities Begins with Designs That:

- Meet the special needs of all patients, including women, men, children, HIV/AIDS and the disabled
- Meet the needs of the health clinic staff to provide proper facilities to complete health care services to their patients
- Recognize the importance of medical waste disposal, solid and liquid waste disposal, clean water, general sanitation, and, where feasible, reliable electric supply
- Use indigenous (or easily acquirable) materials so that maintenance, repairs, and day-to-day upkeep can be more easily performed
- Provide training/capacity building to the staff, subconsultants and others for proper project implementation

Community Awareness and Outreach Program. The sustainability of health care facilities requires responsiveness to cross-cutting issues including gender, differential access, disabled access, minority and ethnic groups, and the environment.

In Year One, a CAOP was outlined to coordinate outreach activities in impacted communities with minimal adaptation. The CAOP, is being designed in collaboration with USAID, the FMOH Regional Health Bureaus and the CRMS Contractor representatives, ensures the concerns of the communities are addressed during the implementation phases, particularly the inputs of women, minorities, the disabled, people living with HIV and AIDS (PLHA) and other marginalized groups. The CAOP will increase the community's support and utilization of the clinics, and also influence program and the construction activities.

Figure 1: The EHIP has provided training to Ethiopian field assessment and design teams .

Capacity Building The EHIP is building local capacity in meaningful ways. Several Ethiopian A-E consulting firms are performing a significant portion of the work, including site assessment surveys, deign of the new prototype Health Center, design of the site adaptations and renovations, and local permitting.

Tetra Tech has provided training to Ethiopian field assessment teams to expand their in-house capabilities. Guidance and training on the QA Assurance Activities Plan will also provide required USAID M&E of the CRMS Contractor.

1. Reporting period

From October 1, 2010	**To September 30, 2011**

2. Publications/reports

Did your organization support the production of publications, reports, guidelines or assessments during the reporting period?

No/Not Applicable ☐
Yes **X** If yes, please list below:
Publications/Reports/Assessments/Curriculums

Title	Author	Date
EHIP – USAID/TetraTech Health Center Trip reports	TetraTech Inc	March 14, 2011 August 8, 2011
EHIP – GoE Std Prototype – Type "B" Design Review		May 10, 2011
EHIP – Preliminary Site Assessment Report		May 23, 2011
EHIP - Summary Preliminary Site Assessment Report		June 27, 2011
EHIP – Concept for Rural Health Center		June 28, 2011
EHIP –Type B Modified Concept Design		August 17, 2011
EHIP –Type B Preliminary Design		August 26, 2011

3. Technical assistance

Did your organization utilize short-term technical assistance during the reporting period?

No/Not Applicable ☐
Yes **X** Please list below:

Consultants/TDYers

Name	Arrival	Departure	Organization	Type of technical assistance provided
[redacted], SR. Architect	4/30/2011 6/25/2011	5/08/2011 6/30/2011	TetraTech	Architectural Health Care prototype Concept Design & workshop facilitation
[redacted]	5/15/2011	6/06/2011	TetraTech	Facilitation of Concept Plan development
[redacted], PE	6/07/2011	7/01/2011	TetraTech	Acting COP, planning & design support, coordination of construction planning,
[redacted]	6/26/2011	7/01/2011	TetraTech	IT integration of accounting activities
[redacted]	9/13/2011	9/30/2011	TetraTech	QA Program development & Project Environmental Reporting
[redacted]	9/7/2011	11/7/2011	TetraTech	Acting COP, planning & design support, coordination of renovation program

4. Travel and Visits

Did your organization support international travel during the reporting period?

No/Not Applicable ☐
Yes **X** Please list below:

International Travel (All international travel to conference, workshops, trainings, HQ or meetings).

Name	Destination	Departure/Ethiopia	Arrival	Host Organization	Purpose of the travel
[redacted]	MA USA	6/02/2011	6/18/2011	TetraTech	HQ Coordination

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Have any Monitoring Visit/supervision been made to your program in during the reporting period?

Description of Monitoring team	Start date	End date	Sites visited	Written recommendations provided
[redacted], SR VP	4/15/2011	4/22/2011	EHIP Addis Ababa Office USAID Offices	Senior management review of overall task order progress/performance and activities with key USAID staff
Home Office Management	4/1/2011	6/30/2011	EHIP Addis Ababa Office through conferencing	Weekly conference calls provide QA/QC and add resources required to support in-country team on production of work activities, deliverables and project financials.
[redacted], SR VP	7/24/2011	7/29/2011	EHIP Addis Ababa Office USAID Offices	QA of overall program progress. Meetings with USAID re: program status and discussions of needed budget adjustments once program matures.

5. Activity

Program Area (Tick all which apply)	Activity ID	Activity Title (Please write the title of the activity)
☐ **01-PMTCT**		
☐ **02-HVAB**		
☐ **03-HVOP**		
☐ **04-HMBL**		
☐ **05-HMIN**		
☐ **07-CIRC**		
☐ **08-HBHC**		
☐ **09-HTXS**		
☐ **10-HVTB**		
☐ **11-HKID**		
☐ **12-HVCT**		
☐ **13-PDTX**		
☐ **14-PDCS**		
☐ **15-HTXD**		
☐ **16-HLAB**		
☐ **17-HVSI**		
☒ **18-OHSS**	EDH-I-00-08-00027-00, TO AID-662-TO-11-0001	Ethiopia Health Infrastructure Program (EHIP)

6. Accomplishments and successes during the reporting period

The EHIP program which began December 6, 2010 is to be implemented over a 5 year period. The program supports the USAID/Ethiopia Strategic Objective (SO) 14: "Increasing Human Capacity and Human Resiliency" which combines objectives in health/population/nutrition (HPN), HIV/AIDS, and education. The program is categorized as an Other Health System Strengthening (OHSS) program area within the HIV & AIDS Programs/PEPFAR. Custom performance indicators have been developed and vetted with the EHIP – COTR and provided in separate spreadsheet (b).

The HPN (HPN) component uses a two-pronged approach to strengthen routine health services to withstand shocks and to improve communities' emergency readiness and response. The HIV/AIDS component, in the form of the President's Emergency Plan for AIDS Relief (PEPFAR), aims to expand the provision of antiretroviral therapy (ART) over time as well as to reduce risk behavior and mother-to-child HIV transmission. This component will also increase care and support for People Living with HIV/AIDS (PLWHA), including orphans and vulnerable children (OVC).

The EHIP program supports SO 14 by providing USAID/Ethiopia and the Federal Ministry of Health (FMoH), Architectural and Engineering (A-E) evaluation and design support for construction and renovation of up to 400 new and existing Heath Centers throughout Ethiopia. This SO for the EHIP program will additionally contribute to 3 Intermediate Results (IRs) of the SO14 by improving health infrastructure throughout Ethiopia and will specifically address implementation of the following:

- **Appropriate Site Adaptations for the construction of the new health centers**
  By improving access/availability to new health care facilities with the evaluation of new Health Center sites and development of site adaptations for new Health Centers, preparing documents for construction implementation and development of a community Outreach program

- **Site specific full design document for each existing health center to be renovated**
  By improving the quality of the existing health care facilities through evaluations for enhancements and improvement, development of renovation design for the existing facilities that set a standard for Health Care Centers in Ethiopia and preparing documents for construction implementation.

- **Compliance of construction and renovation of warehouses and health centers to the design and specification**
  By improving USAID/Ethiopia A-E staff capabilities for health infrastructure issues, identifying and implementing sustainable construction materials and methods, preparation of a QA program, and improving capacity of health care center construction and management.

Appropriate Site Adaptations for the construction of the new health centers

The Site adaptation activities that support the construction of the new health centers are the main program activities that have been in the implemented on this program in FY2011.

Table 1: Site Adaptation Project Activities for FY2011 include bolded items:

Top-level Task	Activity(s)
Assessment and design of approximately 92 Proposed Sites	• **List of Prioritized Sites (from Pre-Assessment of 92 sites**)
	• **Community Awareness & Outreach Program (CAOP) Outline**
	• **Concept Design/Modified Prototype**
	• **Final Design/Modified Prototype** • **Preliminary design** • Draft Final design • Final construction documents
	• **Final Site Adaptation Construction drawings** for +/- 92 sites
	• **Rough Order of Magnitude (ROM) estimate of cost**
	• Support to USAID for construction
Quality Control/ Quality Assurance Manual/Plan	• **Draft Final QA Manual**
Assessment/Renovations for 75 Existing Sites	• **Pre - Assessment Programming – Design Criteria identified** • **List of Renovation Sites** • Final construction design – renovations

The FY2011 Site Adaptation accomplishments and successes were focused on:

Assessment and design of approximately 92 Proposed Sites

List of Prioritized Sites (from Pre-Assessment of 92 sites):

The Ethiopian Federal Ministry of Health (FMoH) furnished USAID with a list of 92 proposed Health Center sites in February and Tetra Tech proceeded with site pre-assessments of these 92 sites. Sites were located throughout rural areas of Ethiopia including Oromia, Amhara and SNNPR regions.

Field activities gathered data to provide USAID/EHIP with an understanding of the situation at each site. The 92 sites were categorized into four tiers and prioritized for advancement to the site adaptation phase.

Under Achievements: The pre-assessments were an added activity as there was marginal initial information provided by the FMoH about each site. The field teams worked with the RHBs to locate the sites but in some cases the sites already had HCs, had HCs under construction, no site existed, there were land disputes or the sites were too small. These added coordination efforts that were needed for the collection of this data delayed the schedule by over 2 weeks.

Accomplishments & Successes include:

- ✓ A Preliminary Site Assessment Report was prepared and submitted on May 23, 2011 which detailed the activities, findings and recommendations of the Preliminary Site Assessments performed.
- ✓ 15 (Fifteen) of the 92 proposed sites were identified as first-tier sites that could advance through the design process more quickly than others.
- ✓ 18 (Eighteen) sites were advanced to the field investigation phase of the Site Adaptation process.
- ✓ A follow-up summary report was developed for submittal to the FMoH for a meeting with the State Minister to report the findings and seek clarification.

Concept Design/Modified Health Center Prototype:

Type "B" Recommendation Report: Various versions of the Type "A" and Type "B" design drawings were reviewed for functional, clinical, structural, and systemic deficiencies. Field trips were made where numerous Health Care professionals were questioned about their practical experience. A subsequent report entitled GoE Standard Prototype - Type "B" Design Review, dated May 10, 2011 was prepared. The report detailed findings that the Type "B" design was not complete, missing critical elements and additionally did not meet the FMoH formalized *September 2010 Minimum Standard for Health Center* developed by FMoH/FMHACA that was developed to ensure a uniform quality of health services in Ethiopia. The report identified many essential health care medical services and space/layout requirements that are acknowledged as core functions that are missing from the Type "B" design. Sanitation and waste management programming was identified as needing serious attention to provide a sanitary, clean and safe environment. Additionally, site adaptation design and construction requirements needed further definition including more detailed plans and specifications to help ensure that the construction and site application of the Health Centers is implemented properly and of a quality design to meet the needs for USAID-constructed health centers under the EHIP.

Accomplishments and successes include:

- ✓ Field trips, programming sessions and Health Care professionals queried
- ✓ GoE Standard Prototype - Type "B" Design Review report was prepared and submitted on May 10, 2011.

Workshop Review of Health Center Plans: A comprehensive programming effort and a Concept Design began with workshops held on May 3, 2011 and May 5, 2011 which garnered the best perspectives from experienced engineers, architects and health care professionals, the FMoH, the consultant, academic communities and USAID contract/technical staff who have contributed to the development of Health Centers in Ethiopia. Critical issues and primary concerns were captured during the presentation which included the need to modify the prototype design:

- to incorporate current policies of the FMoH that will provide effective health services into the future and set a minimum standard for Health Centers in Ethiopia
- to offer a facility that is efficient and effective from the patient's point of view
- to develop a design that is fully functional and sustainable
- to be adaptable to the wide variety of site conditions found in Ethiopia

A Concept Plan for a Modified Prototype HC Design based on the 2010 Minimum Health Care Standard was developed and presented at a follow-up Workshop held on June 28, 2011. FMoH (PHID and FMHACA) and USAID representatives agreed to review the design against the 2010 standards and provide comments. A cost estimate at the concept level was also provided = $1,194,891. USAID determined the costs were beyond the budget.

Accomplishments and successes include:

- ✓ Concept Plan programming and Workshop held on May 3 and May 5, 2011
- ✓ Concept Design Workshop held on June 28, 2011.
- ✓ 2010 Minimum Health Care Standard Concept Design and cost estimate developed.

Final Design/Modified Prototype HC - Preliminary design – 2010 STDS:
Preliminary design efforts for the prototype HC design based on the 2010 Minimum Standards began on June 10, 2010 utilizing Home Office Support staff. These services were shifted to the US staff in an attempt to meet an accelerated schedule date of September 15, 2011 so the first group of 9 (nine) Site Adaptation CDs could potentially be issued for construction. This work was put on hold by USAID on June 29, 2011 since the design was beyond the budget.

Accomplishments include:

- ✓ Initiation of the Preliminary Design of the Modified Prototype Health Center
- ✓ Identification and formation of detailed project specifications

.

Revised Concept Design of Modified Type "B" HC Prototype:
A request was made on June 29, 2010 by USAID for TetraTech to refocus the modified design back to the Type B" with the following specifics:

- Use the GoE endorsed "Type B" design plans as a basis of design
- Improve the design for handicapped accessibility – ADA
- Add an Administration function - new block or rooms/rooms with added storage
- Add a provision for an infectious disease component
- Improve the quality of construction and finish materials

and shift the design from the TetraTech home office support staff back to Ethiopian resources. This realignment of design basis and using local resources affected the project schedule.

The first step in the design process was to prepare a Concept Plan. However, first we needed to identify other Ethiopian A/E firms that had the capacity to perform these services. A formal RFP process for A/E Design for a Modified Type "B" prototypical was conducted. Solicitation went to six (6) Ethiopian firms. 4 firms responded and 2 declined to bid. TetraTech evaluated and scored all proposals in areas of technical expertise, similar prototype designs, other relevant/past experience, qualifications, competitiveness and cost reasonableness. The twp (2) top rated firms were interviewed. [redacted], PLC pvt CO was selected.

- o [redacted] was verbally informed of selection on July 29, 2011. Meetings were held on August 1-2, 2011 at TetraTech offices for final negotiations.
- o Notice of Intent to Award was sent to all firms August 1, 2011.
- o [redacted] / Tetra Tech signed contracted August 2, 2011.

Accomplishments include:

- ✓ TetraTech conducted a formal solicitation process and chose an Ethiopian A/E subconsultant, [redacted] to perform the prototype design locally.
- ✓ TetraTech obtained USAID consent to subcontract with [redacted].
- ✓ TetraTech produced a revised Concept Plan as defined on July 14, 2011.
- ✓ The Plan was vetted by USAID and FMoH representatives which resulted in additional clinical services and spaces being added.
- ✓ The Plan was revised and became the basis of design for the preliminary and final Modified Type "B" HC Prototype Design.
- ✓ Modified Prototype Construction Documents at 50% complete on August 26, 2011.

Final Site Adaptation Construction drawings for +/- 92 sites
Field Survey Assessments: Field investigation work, data gathering and coordination with local water, electricity and health officials for the development of full site adaptation construction documents was initially completed on Nine (9) Tier One sites identified in a clustered area of Oromia. Nine (9) more were later added in Oromia and SNNPR. Those added include:

- seven (7) Tier Two sites – 3:SNNPR, 4:Oromia
- two (2) Tier Three sites – 1: SNNPR; 1:Oromia

This clustering approach was adopted to prepare a group of sites with close proximity to one another so a Task Order could be issued to the USAID CRMS Contractor.

In August all work on the sites in Oromia were put on hold since the Oromia Regional Health bureau made the decision to tender this work directly. This left only 5 sites that could advance to the Site Adaptation phase. The remaining 30 sites from Tier Two and Tier Three in Amhara and SNNPR even though more challenging to develop were advanced to the site adaptation phase but without off-site utility design. Two additional Subconsultants were approved by USAID as partner subconsultants. A NTP for the additional thirty (30) sites was issued on 8/25/2011 to three (3) of our approved subconsultants.

Grading and Drainage: An important component of the adaptation design that has been missing from locally prepared site plans that have been reviewed is grading and drainage design. This design concept seems unfamiliar to the Ethiopian A/E firms we have questioned. Therefore, these design efforts were prepared by the home office staff for the first eighteen (18) sites and will be used as a model for the thirty (30) site plans being prepared by our Ethiopian subconsultants. Our home office design teams regularly prepare grading and drainage plans for our projects and are able to efficiently provide these and detailed plans and specifications. Home office QA will also help ensure that the construction documents and site application of the prototype design is implemented properly. We also deployed an additional STTA, Joe Hanlon with extensive experience with these prototype packages that will remain in country through the entire CD production mentoring our subs to assure a quality project delivery to USAID.

Accomplishments include:

- Addition of Ethiopian resources to accomplish work activities locally
- Completion of field investigation activities for 18 sites
- Site Adaptation CDs, BOQs and detailed specification at 30% complete.

Assessment of approximately 75 Renovation Sites: A request was made on July 26, 2011 by USAID for TetraTech to identify the first seventy-five (75) renovation sites in the five regions: Addis Ababa, Tigray, SNNPR, Amhara and Oromia for renovation and rehabilitation. USAID/TetraTech field trip for some pre-assessment actions occurred August 8 - 13, 2011. Sites were initially expected to be identified by FMoH for prioritization by TetraTech; instead the % allocation for each region for the first 75 sites was provided by FMoH.

In mid August this work activity shifted back to USAID working with FMOH to identify the renovation sites. As of year end, 65 of the first 75 renovation sites have been identified and 40 have been identified for the 2nd set of 75.

Accomplishments:

- ✓ New work activity for TetraTech to begin investigation to identify first 75 existing HC sites.
- ✓ Field trip conducted 8/8/11 – 8/13/11USAID/TetraTech visited some proposed sites in Amhara Region on the way to Tigray Regional Health Bureau to begin identification of 75 existing sites.
- ✓ Communication with USAID and FMoH in development of initial program activities.
- ✓ Program planning for additional staff resources
- ✓ Further development of a preliminary checklist for assessments
- ✓ Coordination with AHSE program to obtain previous assessment criteria and status of previous 100 HCs assessed and renovations performed

7. Challenges and Constraints and plans to overcome them during the reporting period

Assessment and design of approximately 92 Proposed Sites:
List of Prioritized Sites (from Pre-Assessment of 92 sites):

All of the 92 sites except Tier 4 sites have advanced to the Site Adaptation phase.
31 sites were originally categorized into Tier 4 - Sites with Identified Constraints.
Only 15 sites - (5) in SNNPR and (10) in Amhara remain in Tier 4 since all proposed prototype sites in Oromia are being exchanged for renovation sites at the request of the RHBs.
They fall into five categories:

1. **No site exists.** At one Amhara (1) location, local authorities have not identified any such site.
2. **Health Center is already built or under construction**. This is the case at three (3) SNNPR sites.
3. **Disputed site.** The current occupants are opposing the project or local authorities are not in concurrence as to which site should be developed .This is the case at five (5) Amhara sites and one (1) SNNPR site. .
4. **Walk-in site.** There is no access road to the site, which can be reached only by foot or on horseback. Development of these "walk-in" sites will require additional efforts and $$$ by the CRMS contractor. There are three (3) Amhara walk-in sites and one (1) one SNNPR site. .
5. **Small site.** The FMoH requested local authorities to provide sites that are a minimum of 6,000 square meters. Several are smaller. There is one (1) Amhara sites.

Plans to overcome: Tetra Tech will continue to work with USAID and the FMoH to clarify constraints or identify different sites and provide practical solutions for these conditions. As further field investigations, analysis and solutions are explored, we will re-categorize these sites into the appropriate Tier so they can be quickly moved through the site adaptation design process and subsequent construction phase.

Quality Control/Quality Assurance Program

TetraTech drafted a Quality Assurance program during 2011 Qtr 4 that began with a "standard QA plan" that identified specific areas of focus for independent monitoring of the USAID/CRMS contractor as well as focused on technical assistance of quality construction and utilization of quality materials and an independent spot check program. This was provided to USAID for review. In early September, we deployed our Key Personnel STTA, [redacted] to our Addis Ababa Office to work directly with the CRMS COTR, [redacted] to further develop the program and set expectations. TetraTech awaits the [redacted] CRMS QC Plan that will be reviewed and processes integrated into the QA Program. 25 - 50 spot checks per quarter were set as a goal for the program as well as a planned training program which will require TetraTech to evaluate required staff resources for a responsive plan and address budget realignment impacts.

Plans to overcome: Tetra Tech is developing a SOW and ROM that will be presented to USAID in 1Qtr2012 for collaboration and ultimate acceptance.

8. Data Quality issues during the reporting period

Specific concerns you have with the quality of the data for program areas reported in this report

Programmatic and M&E issues are not apparent in the EHIP program. HIV/AIDS targets are set through the selection of sites being designed and constructed, renovated or refurbished. They will be health facilities with high antiretroviral therapy (ART) patient loads and in areas of Ethiopia having high HIV prevalence which supports attaining the goals of the health system expansion program in Ethiopia. Each Health Center is chosen to provide health facility coverage for primary health care to service delivery to health centers serving populations of 25,000. The health system expansion program also seeks to improve HIV/AIDS service and disease management services by increasing coverage at primary care service delivery facilities. These improved health facilities will support these services as well as adding other clinical services that have been missing from the facilities such as emergency care and improved clinical, laboratory and inpatient and outpatient services.

Specific performance indicators disaggregate the following Three (3) primary indicators.

- *Appropriate Site Adaptations for the construction of the new health centers*
- *Site specific full design document for each existing health center to be renovated*
- *Compliance of construction and renovation of health centers to the design and specification*

All performance indicators agreed upon and contained in the EHIP Performance Monitoring Plan have been 100% achieved.

What you are doing on a routine basis to ensure that your data is high quality for each program area

All 2011 performance indicators that were developed in collaboration with the EHIP – COTR and ACOTR have been met. The 2012 Annual Workplan and the 2012 Performance Monitoring Plan are used as the M&E program for the project. Schedule updates are provided weekly to track progress and address any program deviations.

How you planned to address those concerns / improve the quality of your data for each program area

Continue using M&E tools and collaborative approach with the USAID Mission.

9. Major Activities planned in the next reporting period

Objectives and approach and specific performance indicators for the 5 year EHIP program include:

- **Appropriate Site Adaptations for the construction of the new health centers**
- **Site specific full design document for each existing health center to be renovated**
- **Compliance of construction and renovation of warehouses and health centers to the design and specification**

Goals for the 1st quarter of 2012 continue to be focused around completion of the Prototype Design and Site Adaptations as well as an increased effort for the Renovation program, Quality Assurance activities and construction readiness for 2 Qtr FY 2012.

Table 2: Project Activities for 1Quarter2012 Include those bolded

Top-level Task	Activity(s)
Assessment and design of approximately 92 Proposed Sites	• **List of Prioritized Sites (from Pre-Assessment of 92 sites) remaining 15 sites**
	• **Community Awareness & Outreach Program (CAOP)**
	• **Concept Design/Modified Prototype**
	• **Final Design/Modified Prototype** • **Preliminary design** • **Draft Final design** • Final construction documents
	• **Final Site Adaptation Construction drawings** for +/- 92 sites
	• **Rough Order of Magnitude (ROM) estimate of cost**
	• **Support to USAID for construction package**
Quality Control/ Quality Assurance Manual/Plan	• **Final QA Manual Program**
Assessment/Renovations for 75 Existing Sites – first and 2nd grouping of 75 each	• **Design Criteria checklist identified** • **Renovation Program Plan** • **Initial and Detail Investigation** • **Final construction design – renovations**

The 1Qtr 2012 efforts will be focused on:
Assessment and design of approximately 92 Proposed Sites

List of Prioritized Sites (from Pre-Assessment of 92 sites):

Tetra Tech will continue to work with USAID and the FMoH to clarify budget and schedule constraints or identify different sites for those omitted and provide practical solutions for these conditions. As further field investigations, analysis and solutions are explored, we will re-categorize these sites into the appropriate Tier so they can be quickly moved through the site adaptation design process and subsequent construction phase.

Community Awareness and Outreach Program

The development of a Community Awareness and Outreach Program (CAOP) will seek support and input from the community for the purpose of increasing community's participation and utilization of the HCs as well as inform them about the overall program progress and the upcoming construction activities. This program will be generated in collaboration with the CRMS program and USAID. The CAOP will be designed to be used by the RBHs in each impacted community with minimum adaptation. An outline will initially be provided to USAID for discussion and clarification of work activities going forward.

Final Design/Modified Prototype Type "B" HC – Preliminary/Final design:

The preliminary 50% design documents were submitted in 4Qtr2011. Substantial work efforts will occur this period on the Final Draft documents which are scheduled for submittal in 1 Qtr2012 on October 6, 2011 with final documents ready for the CRMS bids on November 3, 2011. These construction packages will include design plans, design reports, BOQs with costs and detailed specifications.

Final Site Adaptation Construction drawings for +/- 92 sites

5 Site Adaptation construction packages including design plans, design reports, BOQs and detailed specifications will be the final deliverable with the prototype design embedded in the 5 sets of Construction Plans.

Additional groups of the remaining Tier Two and Tier Three sites have been identified in the SNNPR and Amhara region. Field investigation work/ Site Adaptation construction plans are underway for these 30 sites. The schedule for completion is for the end of November when additional construction packages are scheduled to be issued to the CRMS Contractor by USAID for a construction start in 2Qtr2012 end of January.

Approximately 15 sites remain to be clarified/identified with FMoH. It is anticipated the sites will be provided in1Qtr2012 with Site Adaptation work activities to follow. It is assumed these construction packages will be issued 2Qtr2011.

Assessment of Renovation Sites in groups of 75 each*:*
Sixty-four (64) of the first seventy-five (75) renovation sites in the five regions: Addis Ababa, Tigray, SNNPR, Amhara and Oromia for renovation and rehabilitation have been identified by USAID. An additional thirty (30) in Oromia have been identified for the 2nd group of 75. Planned work activities include:

- *Development and signoff of the proposed Renovation Site Checklist*
- *Communication with USAID and FMoH in development of initial program activities.*
- *Further development of a preliminary checklist for assessments*
- *Initiation of the first assessments by TT CCN staff*
- *Program planning for additional staff resources and subconsultant needs to implement the remainder of the program that will result in the first renovation construction package to be issued by 2Qtr2011 end.*
- *Continued coordination with AHSE program to obtain previous assessment criteria and status of previous 100 HCs assessed and renovations performed*

Quality Control/Quality Assurance Program
TetraTech drafted a Quality Assurance program during 1Qtr2011 that began with a "standard QA plan" that identified specific areas of focus for independent monitoring of the USAID/CRMS contractor as well as focused on technical assistance of quality construction and utilization of quality materials and an independent spot check program. This is currently under review by USAID and the CRMS contactor. Once comments are received and the CRMS Quality Plan is reviewed, the QA Plan will be updated. A training program is also being developed in collaboration with USAID. This data will assist TetraTech in evaluating the required staff resources for a responsive plan.

Tetra Tech is developing a SOW and ROM that will be presented to USAID in 1Qtr2012 for collaboration, acceptance and implementation prior to construction start planned for January 2012.

10. Environmental compliance

There are currently no known environmental issues that exist that cannot be addressed with site mitigation measures. These measures are being incorporated into the site adaptation construction drawings and specifications.

Tetra Tech has develop an environmental review format tailored to EHIP: Environmental Review Report (ERR), based on the USAID Africa Bureau's Environmental Review Form and in collaboration with the Ethiopia Mission MEO and USAID project staff.

- TetraTech is using environmental review/compliance-related forms for the current field investigations.
- TetraTech has trained local project engineers and appropriate administrative staff to use the forms during field investigations and to incorporate the mitigation measures into site designs for implementation by the CRMS contractor.

- TetraTech will report environmental compliance to USAID through the Project ERR which has been developed in collaboration with the MEO. The report summarizes the program and environmental compliance activities. A draft submittal is scheduled for 1Qtr2012 prior to construction start
- M&E of the CRMS contractor will occur during the QA Program.

11. Financial accomplishment

Life of Project budget (a)	Obligated to date (b)	Expenditure (Accrual and actual disbursement) to date (9/30/2011) (c)	Remaining balance (d) = (b) – (c)	Remarks
5 years ***12/6/2010 -12/5/2015*** [redacted] USD	[redacted] USD	[redacted] USD	[redacted] USD	***With the current project burn rate, obligated funds are expected to be depleted March 2Qtr2012***.

12. Issues requiring the attention of USAID Management

- Need to address added LOE for project work activities
- Need to address internal budget realignment

13. Data Sharing with Host Government:

Have you shared this report with the host government?

Yes ☐
No **X**

If yes, to which governmental office/s?

[Please put your response here]

If No, why not?

TetraTech is under contract with USAID for the EHIP program and therefore will not distribute this report until we have concurrence from USAID on the content contain herein and concurrence to distribute to the appropriate agencies one of which is certainly the Ethiopian Federal Ministry of Health. We will seek this concurrence.

14. Appendices

- EHIP – USAID/TetraTech Health Center Trip reports
- EHIP – GoE Standard Prototype – Type “B” Design Review
- EHIP – Preliminary Site Assessment Report
- EHIP - Summary Preliminary Assessment Report
- EHIP - Concept for Rural Health Center

Appendix A

USAID FROM THE AMERICAN PEOPLE | ETHIOPIA HEALTH INFRASTRUCTURE PROGRAM

HEALTH INFRASTRUCTURE PROGRAM

Preliminary Site Assessment Report
Volume 1

May 23,2011

This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech, Inc.

This report was prepared for the United States Agency for International Development, Task Order RFTOP 663-10-00001, Ethiopia Health and Infrastructure Program.

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Preliminary Site Assessment Report

Submitted to:
USAID/Ethiopia
May 23,2011

May 23,2011

Damenaw Yohannes, COTR
USAID/Ethiopia
U.S. Agency for International Development
US Embassy, Entoto Street
PO Box 1014
Addis Ababa, Ethiopia

Re: EHIP - Preliminary Site Assessment Report
Ethiopia Health Infrastructure Program (EHIP)
Contract No. EDH-I-00-08-00027
Task Order No. AID-663-TO-11-00001

Dear Mr. Yohannes:

Tetra Tech is pleased to submit the EHIP – Preliminary Site Assessment report of the 92 proposed Health Center sites identified by the Ethiopian Federal Ministry of Health (FMoH) for your review and comment. This report details the activities, findings and recommendations of the Preliminary Site Assessments performed on these 92 sites.

In this report you will find these sites categorized into a 3 tier system. 15 (fifteen) of the 92 (ninety two) sites have been identified in the first-tier and these have been further evaluated and prioritized. It is our recommendation that these 15 sites be considered for advancement to the site adaptation phase.

We are prepared to discuss this report in greater detail with you to determine the next steps forward. Please let me know if you have questions or comments.

Very truly yours,

[redacted]
Chief of Party (EHIP)
Tetra Tech, Inc.

Cc: [redacted], Civil Engineer
[redacted], Sr. Acquisition & Assistance Management Specialist,

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Volume 1: Draft Preliminary Site Assessment Report

Volume 2: SNNPR Full Report Documents

Volume 3: Oromia Region Full Report Documents

Volume 4: Amhara Region Full Report Documents

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List of Abbreviations and Acronyms

ART	Anti-retroviral Therapy
COTR	Contracting Officer's Technical Representative
CRMS	Construction and Renovation Management Services
EHIP	Ethiopia Health Infrastructure Program
FMoH	Federal Ministry of Health
GPS	Geographic Positioning System
HC	Health Center
HCB	Hollow Core Block
POC	Point of Contact
SNNPR	Southern Nations, Nationalities and People's Region
TT	Tetra Tech
USAID	United States Agency for International Development

1.0 Executive Summary

Tetra Tech has been contracted by USAID/Ethiopia to perform site assessments and develop construction documents for the construction of up to 85 new Health Centers, 9 new Regional Warehouses, and the renovation of up to 300 existing Health Centers under the Ethiopian Health Infrastructure Program (EHIP). The Ethiopian Federal Ministry of Health (FMoH) furnished USAID with a list of 92 proposed Health Center sites on February 22, 2011 and USAID requested Tetra Tech to proceed with site assessments of these 92 sites. This report details the activities, findings and recommendations of the Preliminary Site Assessments performed on these 92 sites.

Field activities gathered data to provide USAID/EHIP with an understanding of the situation at each site. The 92 sites have been categorized into three tiers:

- The first-tier represents a group that mostly has good road, water and electricity access and it is expected that these sites can be developed without excessive effort to provide these ancillary services.

- The second-tier represents a group that needs further development of ancillary services (road improvement, development of a reliable local water and/or provision of alternative energy source).

- The third-tier group will need extensive development of ancillary services. (Sites in the third-tier group also include locations that have not yet been identified and sites where Health Centers have been built or are currently under construction by others.)

Fifteen of the 92 proposed sites have been identified in the first-tier and these have been further evaluated and prioritized. While some of these sites do not have the full set of available water, electricity and all-weather access road, they are expected to present a minimum of difficulties to develop. A brief description of each of these sites is presented in the body of this report and a map showing their location is presented in the Appendix. Tetra Tech is prepared to begin activities leading to full site adaptation of these sites pending COTR concurrence.

Priority	Site Name	Region
1	Ambuye	Oromia
2	Welela Bahir	Amhara
3	Gebre Christos	Oromia
4	Cingi	Oromia
5	Ego	Oromia
6	Gado Guna	Oromia
7	Sole Madero	Oromia
8	Mehal Jarso	SNNPR

Priority	Site Name	Region
9	Arda Tere	Oromia
10	Ledeta	Amhara
11	Gelsha	Amhara
12	Chabe Didanyata	Oromia
13	Knchere	Oromia
14	Kosero	Amhara
15	Adere Lepho	Oromia

Second- and third-tier sites will be evaluated and prioritized after first-tier activities are well underway. Tetra Tech will coordinate with local officials to facilitate utility service and road improvements and incorporate lessons learned from earlier work. This staggered implementation approach will allow time for these coordination activities to prepare the sites for development.

2.0 Background

The Ethiopian Federal Ministry of Health (FMoH) furnished USAID with a list of 92 proposed Health Center sites on February 22, 2011 and USAID requested Tetra Tech to proceed with site assessments of these 92 sites. Little was known about these sites, including the actual location, appropriate points of contact, or whether the sites were allocated and available or simply that the FMoH has expressed a desire to build a Health Center somewhere in the specified Woreda. The COTR expressed concern that some of the sites may be inappropriate, unsuitable, require extensive development efforts to prepare a site for construction, or that a Health Center may already be under construction on the site. With so many unknown factors, it was not possible to estimate the amount of time it would take to travel to, locate, and assess each of the 92 sites. To minimize unproductive time and resource expenditure in sending a full assessment team to sites that might quickly be determined to be unsuitable, USAID and Tetra Tech agreed to an alternative approach to define and execute a rapid "Preliminary Site Assessment" of each site to provide adequate intelligence to allow USAID to make informed decisions as to the way forward.

3.0 Assessment Activities

Field activities began on March 16 with four assessment teams traveling on routes to the east, west, north and south of Addis Ababa and all assessments were completed by May 12, 2011. Ninety of the ninety-two sites were identified and basic site information collected, including: identification of each site by GPS coordinates; identification of a responsible contact person; photos and sketch of the site; soil and topographic visual assessment; location of water and electricity sources, if any; description of the type and condition of the access road; existing structures on or disputes about the land; and a preliminary environmental evaluation.

Ninety-four sites were actually assessed:

- Eighty sites were assessed with no need for clarification;
- Two of the sites on the list (Megana and Watt) did not correspond to specific, identifiable plots of land (i.e., local officials had not identified and allocated a specific site for the Health Center in that location).
- Five sites (Sacha, Chito, Maze Doyisa, Dara and Korke) presented some ambiguity because the listed site name did not correspond to a village or site within that Woreda. In these cases, Tetra Tech conferred with local officials who suggested that the listed name was either a misspelling on our list or indicated that the name was completely wrong and the Health Center had actually been proposed at another location in their Woreda.
- At one site (Gunda Jarjara), a Health Center had already been constructed, so the authorities directed the assessment team to perform an assessment at another site in the Woreda (Keresole). Six other sites (Awela Wendo, Chito, Konga, Haro Bedame, Ganata, Utulu) had either an existing Health Center or one under construction, but were assessed.
- At two locations (Gurati and Lole Bulchena), the local authorities urged the development of an alternative site for the proposed Health Center and the original site was not assessed.
- At four locations (Chito/Konga, Arda Tere/Kara, Afafe/Awas and Dolo1/Dolo 2), two sites were assessed either because the local authorities urged the development of an

alternate site or because the name provided on the list could be interpreted to mean either location.

4.0 Findings

Full reports of all 94 assessed sites are included with this report in subsequent volumes, organized by Region.

The typical site has seasonal road access, no developed water source and no access to electricity. It has suitable soil and topography and some grading will be required. It is ready for site development although on some sites small structures will need to be demolished. The local community is aware that a Health Center is planned in their village and they are anxious to see it built. In most places, the community has indicated that they are willing to contribute labor or materials, land, even their farm or home to be demolished to have a Health Center built. Some communities have heard that the Health Center will not be built until there is road access to the site and have begun building a road by hand to accelerate the project. At all sites assessed, Tetra Tech has identified an appropriate Point of Contact (POC) (including phone number and sometimes email address), to coordinate future activities.

All the findings have been summarized on a color-coded spreadsheet that is found in Appendix B. The summary has been done by grouping the information gathered into 14 categories as follows:

1. Health Center name and location
2. Point of Contact information
3. GPS coordinates
4. Existing Structures on the site
5. Current use of the land
6. If there are any current construction activities on the site
7. Access road conditions
8. Utilities available in the vicinity
9. Drainage issues evident on site
10. Soil and topographic information
11. Potential entry issues or land disputes relative to the site
12. Community awareness of the plan to construct a Health Center
13. Environmental concerns
14. Number of Patients on ART (as provided on the "Confirmed list of HC's for PEPFAR" from FMoH)

This summary categorizes the answers to the above questions in 3 color-coded tiers:

- **Green** for those parameters that have no known problems;
- **Yellow** for parameters that present some obstacles but that are expected to be managed without excessive resource expenditure;
- **Pink** for those parameters that present significant obstacles and mitigation efforts present a considerable challenge.

In developing this summary, Tetra Tech has assumed the development of the Health Centers will substantially follow the intent of the *2010 Minimum Standard for Health Center* prepared by FMoH/FMHACA. In this document, the FMoH sets minimum requirements for the establishment and maintenance of health centers. The *Minimum Standards* include requirements that a facility be fully functional with: vehicular access onto the Health Center compound, fully plumbed and provided with running water and electricity. Most of the pink on the summary chart is due to lack of access or water. Certainly Health Centers can and have been built in areas without vehicular access or running water; however, these sites have been categorized as tier 3 in the prioritization process as they will require the most extensive development. If USAID decides such facilities should be constructed under EHIP, Tetra Tech is prepared to move forward with modified designs and site adaptations on these sites.

5.0 Recommendations

All sites have been reviewed and categorized into three tiers, based primarily upon their ease of development. Tetra Tech is aware that USAID may have additional considerations, such as regional parity, in selecting which sites to move forward to the side adaptation process, and in what order. Tetra Tech is prepared to modify the prioritization accordingly based on specified additional considerations, if requested to do so by the COTR. Certainly some subjectivity is involved in this categorization, combined with careful consideration of all assessment factors and the relative risk associated with mitigation of obstacles present at each site to develop a fully functional and accessible Health Center. Consideration was also given to the ability of a contractor to mobilize his forces/materials to the site, development of utilities, site grading, soil conditions, site availability, environmental concerns and number of reported patients on anti-retroviral therapy (ART).

- The first-tier, summarized in Table 5.1, represents a group that mostly has good road, water and electricity access and it is expected that they can be developed without excessive effort to develop these ancillary services.
- The second-tier represents a group that clearly needs further development of ancillary services (road improvement, upgrades to or development of a reliable water source, and/or installation of alternative source of electricity).
- The third-tier group will need extensive development of ancillary services (road construction, development of a water source, and/or provision of alternative energy source)

Tetra Tech recommends staggering implementation of site adaptations by tier, and proceeding with the first-tier sites by initiating more detailed field investigations (topographic survey, soil analysis, detailed water and electrical survey, initial environmental investigation) leading to site adaptations and full construction documents. While conducting field activities, coordination activities in all 3 regions will commence to facilitate development of sites in all three tiers.

Table 5.1 is a summary of the first-tier sites' findings. Full reports of the 15 most favorable sites are included in this volume in Appendix C.

Table 5.1: First-Tier Site Recommendations for Further Development of New Health Centers by USAID/EHIP

	1 HC Name	2 POC	3 (N)	GPS (E)	4 Clear	5 Use	6 Const	7 Road	8 Utilities	9 Draina	10 Geo	11 ROE	12 CA	13 Enviro	Patients on ART	Recommendation	Comments
1	Ambuye		07-58'25"	36-54'06"	house	coffee plantation					slope/clay				98		good road, good utilities
2	Welela Baher		11-38'26"	38-15'16"							blkcotton				277		water/elec avail; allweather road; some drainage issues; black cotton soil; ground water protection required
3	G/Kirstos		07-33'42"	39-24'18"											62		good road, water, elec avail;
4	Chingi		09-02.837'	36-43.208'		clinic									51		on good road near paved;piped water and elec grid;some drainage issues to be mitigated
5	Ego		07-37'33"	38-59'24"											62		groundwater protection required
6	Gadoguna		07-31'34"	39-28'35"	clinic						blk cotton				62		water, elec avail; on good road; large site; blk cotton soil; clinic on site
7	Sole Madero		07-42'54"	39-30'11"	clinic/houses						blk cotton				62		gravel road; piped water; no elect; homeowners have been compensated; in village center; several trees on site
8	Mehal Jarso		07-07'35"	37-53'57"	Elec & pump	farming		1kmseas		fill	clay				50		1km from main road on seasonal road; groundwater protection required; imported fill required
9	~~Dara~~ (Arda tere)		7-6'8.5"	40-45'25.4"							clay				171		water avail w/in 500m; groundwater protection required; no power.
10	Ledeta		10-56'27.6	36-52'19.6"							clay				353		Shallow well at adjacent school; no power; ground water protection required.
11	038 Gelsha		10-59'44"	39-33'04"	tanks TBD										4434		groundwater protection required; stone construction possible
12	Chabe Didanyata		07-14'36"	38-31'06"	health post						pumice rock				799		existing health post; rock site; piped water/elec avail; nr paved rd
13	Knchere		07-41'31"	38-56'45"				10kmseas							62		10 km seasonal road;
14	Kosero		11-12'33"	39-42'51"		farming		8km rough		fill					475		8km rough road; **developed groundwater avail**; elec avail; drainage issue/stream onsite--imported fill & grading required; grdwatr protection required
15	Adere Lepho		7-47'19"	38-53'54"	pond/store	farming		7km seas							62		7km seasonal road; 3km gravity pipeline required; elec avail; sandy silt;groundwater protection required

KEY	
	With available information, there seems to be **no serious issues** in the specified category that will prevent USAID from constructing a Health Center at
	With available information, there seem to be **some issues** in the specified category **that may require additional effort, funds or mitigation to enable USAID to construct** a Health Center at this site
	With available information, there seem to be some **serious issues** in the specified category that **may prevent USAID from constructing** a Health Center at this site without additional inputs.

5.1 First-Tier Sites—The Most Favorable Sites

Tetra Tech believes the most expedient implementation of the EHIP in new site development is to prioritize the work to take on the easiest projects first, learn from that experience, then move on to the next group of sites that will present larger challenges after resolving earlier issues. Fifteen sites have been identified for this first-tier group of sites. Primary criteria for being in the first-tier are that the site must have reasonable vehicular access and water must be available or accessible without great difficulty. Power source availability and number of ART patients was also considered. Table 5.1 shows the summarization of the assessment reports on the first-tier sites.

To verify and prioritize the first-tier sites, each of these sites was further evaluated by these primary criteria and assigned a relative numerical value (according to the key following Table 5.2). Each parameter was assigned a weight according to the relative risk of mitigating an unsatisfactory result in that category as follows: Access road was accorded weight=2, Water availability was accorded weight=3, power availability was accorded weight=1.5, and number of HIV/ART patients was accorded weight=1. The weighted parameter values are totaled in the last column of Table 5.2 and the lowest score then becomes the highest priority.

While some of the sites lower on this list may turn into actual second-tier sites as we gather more detailed information, these tiers do not represent discrete groups, but a continuum of site conditions, subjectively divided into three groups. Therefore, the distinction between lower first-tier and upper second-tier is not great. Once USAID has reviewed this tiered prioritization approach and provided direction to move forward, Tetra Tech is prepared to work on site adaptations continuously and work gradually toward more challenging sites. A brief description of each of the prioritized first-tier site conditions is provided below.

Table 5.2: Method of Prioritizing First-Tier Sites

Priority	HC Name	Region	Access (wt=2)	Water (wt=3)	Power (wt=1.5)	HIV (wt=1)	Weighted Total
1	Ambuye	Oromia	1	1	1	1	7.5
2	Welela Bahir	Amhara	1	1	1	1	7.5
3	Gebre Christos	Oromia	1	1	1	3	9.5
4	Cingi	Oromia	2	1	1	3	11.5
5	Ego	Oromia	1	2	1	3	12.5
6	Gado Guna	Oromia	3	1	1	3	13.5
7	Sole Madero	Oromia	1	1	4	3	14
8	Mehal Jarso	SNNPR	2	2	1	3	14.5
9	Arde Tere	Oromia	1	2	4	1	15
10	Ledeta	Amhara	1	2	4	1	15
11	Gelsha	Amhara	2	2	1	4	15.5
12	Chabe Didanyata	Oromia	1	4	1	1	16.5
13	Knchere	Oromia	3	2	2	3	18
14	Kosero	Amhara	2	4	1	1	18.5
15	Adere Lepho	Oromia	3	3	1	3	19.5

Key for Table 5.2:

Access:

1. The site is on an all-weather road.
2. The site is less than 1 km from an all-weather road.

3. The site is less than 2 km from an all-weather road or on a seasonal road.

Water:

1. Water is available on or immediately adjacent to the site.
2. Water is available less than 500 m away from the site or a pump is required to get the water on site.
3. A nearby water system is in place but resolution of some unknown problem is required by local authorities is required to provide water to the site.
4. Non-complex water development is required.

Electricity:

1. Electricity is available on-site or adjacent to the site.
2. Electricity is available less than 1 km away.
3. Electricity is available more than 1 km away.
4. No electricity is available.

HIV/ART patients:

1. Number of patients on ART in the area greatly exceeds 100.
2. Number of patients on ART in the area exceeds 100.
3. Number of patients on ART in the area is between 50 and 100.
4. Number of patients on ART in the area is less than 50.

5.1.1 Ambuye Site

The Ambuye site, in Oromia Region, Jimma Zone, Limu Kosa Woreda, is a former government coffee plantation. There is a wood and mud structure on the site, which will be demolished to accommodate construction of a new Health Center. There are several large trees on the site, as well as the coffee plant and one very large fig tree in the corner of the site. The road access to the site is via good all-weather gravel road, 56 km from Jimma town. There is piped water and electricity available near the site. The nearest Health Center is 18 km away and the town experiences elevated mortality from malaria every year.

5.1.2 Welela Bahir Site

The Welela Bahir site, in Amhara Region, South Gonder Zone, Lay Gaint Woreda, is currently being used as grazing land. The site is on a good all-weather gravel road. Water for the community is piped from a mountain spring by gravity to a large hilltop water tank and from there distributed to village taps. A public tap is located just in front of the site and it is possible to tap into the existing water system at that point. It appears that there is adequate flow and pressure to service the Health Center. There is also an electrical grid in the town that can serve the Health Center. The community is anxious to see construction of the Health Center begin.

5.1.3 Gebre Christos Site

The Gebre Christos site, in Oromia Region, Arsi Zone, Shirka Woreda, is vacant land central to the village and adjacent to the school, Woreda office and community building. The site is on a good all-weather gravel road. There are stone quarries nearby and can provide building stone and aggregate for the project. The main pipeline of the Lemo-Gado water project which supplies household water to the community and several surrounding Kebeles passes across the road near the site and can be tapped for service to the Health Center. There is an electrical grid available in the village as well. Soils are stiff clay and the site is slightly sloped and flat. The community is anxious for the beginning of the construction of the Health Center.

5.1.4 Cingi Site

The Cingi site, in Oromia Region, E. Wollega Zone, Sibu Sire Woreda, is in a semi-urban area. There is a Health Post on the site and many large coniferous trees. The site is large and it is likely that the new Health Center can be constructed on a clear portion of the site without

disturbing the large trees. It is located approximately 200 m from the asphalt road on a good gravel road. There is electricity and piped water in the town. The water pipe, located at the boundary of the site, can be tapped and has adequate surplus flow to supply the Health Center. Again, the people in the area are anxious for the construction of a Health Center in their community, stating that many people die each year from malaria; treatment for malaria is beyond the capacity of the local Health Post.

5.1.5 Ego Site

The Ego site, in Oromia Region, Arsi Zone, Munesa Woreda, is located right at the edge of the village, on the main road, a good all-weather red ash gravel road. It is currently used as grazing land and is bordered by a school and houses. There is electricity on site and a public water tap across the road that comes from a piped water system that can be tapped for the Health Center. The site is large and flat and the community is anxious for construction to begin.

5.1.6 Gado Guna Site

The Gado Guna site, in Oromia Region, Arsi Zone, Shirka Woreda, is bounded by a school and there is an existing (new HCB) Health Post on the site. The access road is a good all-weather gravel road. There is metered water service and an elevated water tank at the Health Post as well as electrical service, both should be suitable for service at the Health Center. There is an existing incinerator on the site, serving the Health Post. The community is disappointed in the delay in construction of the Health Center.

5.1.7 Sole Madero Site

The Sole Madero site, in Oromia Region, Arsi Zone, Tena Woreda, is currently the location of an old Health Post that was constructed of plastered mud walls. There are several other small structures on the site, which are not of permanent-type construction, but the buildings are being used. The site is on a good all-weather gravel road. There is metered piped water on site. There is no electricity available. Alternate energy source will need to be considered for this Health Center (solar or generator). Due to the long delay in construction of the Health Center, some of the people who had previously moved from the houses on the site, returned, but state that they will move again if the Health Center construction begins.

5.1.8 Mehal Jarso Site

The Mehal Jarso site, in SNNPR, Hadiya Zone, Misrak Badewacho Woreda, is currently being used as grazing land. The site is 1 km from a good all-weather road (the 1 km road between the site and the good road is seasonal dirt road). There is a shallow well and hand pump located on-site and there is electricity on site as well. It is expected that the yield from the existing well will be sufficient for the Health Center. The site is flat with clay soil. The local community has been waiting for the development of the Health Center for more than 3 years.

5.1.9 Arda Tere Site

The Arda Tere site, in Oromia Region, Bale Zone, Ginir Woreda, was suggested by Woreda authorities instead of the listed "Dara" site, which does not exist. (There is, however, a site named "Kara" where a new Health Center is currently under construction.) The site is unused and located on a good all-weather gravel road. There is a rock quarry near the site and a source of sand within 17 km. The village is served by a piped water system that serves neighboring Kebeles and has sufficient surplus flow to serve the Health Center. The pipeline is

approximately 500 m from the site. There is no electricity available in the village and an alternate source of power will need to be developed for the Health Center (solar or generator).

5.1.10 Ledeta Site

The Ledeta site, in Amhara Region, Awi Zone, Banja Shikudad Woreda, is currently used as farm land and timber production. It is located adjacent to a primary school and on a good all-weather gravel road. There is a shallow well with a hand pump on the school grounds. Some investigation is required to determine whether this can be developed further for use at the school and the Health Center or if an additional well at the Health Center will need to be dug. There is no electricity available at the village, so an alternate source of power will need to be developed. The community is anxious to see construction of the Health Center begin. The farmers currently using the land are willing to move.

5.1.11 Gelsha Site

The Gelsha site, in Amhara Region, South Wollo Zone, Dessie Zuria Woreda, is located near a primary school and another public building currently being used as a "temporary Health Post" by the local health worker. The site is sloped but can be graded to a suitable condition. It is located 1 km through the village from a good all-weather gravel road. The community water source is from two developed spring catchments. One of these is located approximately 400 meters from the site. There is adequate flow from the spring to supply the Health Center, but it will require laying 400m pipeline and installation of a pump to bring the water to the site. There is electricity in the village available for the Health Center.

5.1.12 Chabe Didanyata Site

The Chabe Didanyata site, in Oromia Region, West Arsi Zone, Shashamane Woreda, is located about 50 m from the asphalt road. There is an existing Health Post on site and a wooden shelter. Electricity and piped water is available in the town, with adequate flow to supply the Health Center. The existing Health Post is made of plastered mud wall construction. The site is small, but the community is willing to add adjacent land to provide as much land as is required. There is a water tank at the existing Health Post that is used to collect rainwater.

5.1.13 Knchere Site

The Knchere site, in Oromia Region, Arsi Zone, Munesa Woreda, is located 10 km down a seasonal road from an all-weather red ash gravel road. The site is gently sloped grassland. There is a main water pipeline 300 meters from the site and this pipe can be tapped to supply the Health Center. There is electricity available in the village but not at the site, so approximately 1 km of line will need to be installed to provide power to the Health Center. The community is very eager to see construction of the Health Center begin and has offered "any help required". To see it happen.

5.1.14 Kosero Site

The Kosero site, in Amhara Region, South Wollo Zone, Tehuledere Woreda, is currently being partially used as farmland and partially unused. It is located next to the school and down 8 km of rough unpaved road. There is electricity available, but no developed water source. There is a spring located approximately 100m from the site that could be developed for serving the Health Center. It is located uphill from the site so it can flow by gravity to the site. The community is building a road by hand in hopes that it will expedite the construction of a Health Center. There is abundant stone available for construction and sand can be sourced from Mersa.

5.1.15 Adere Lepho Site

The Adera Lepho site, in Oromia Region, Arsi Zone, Z/Dugda Woreda, is a flat plot of farmland. There is a small pond and storehouse at one end of the site that could be suitable for construction water and contractor's store. The access is 7 km seasonal road. Water can be sourced from a pipeline 3 km away and brought to the site by gravity. There is electricity available in the village.

5.2 Second- and Third-Tier Sites

Tetra Tech recommends starting with the first-tier sites because they will present fewer difficulties in construction. However, that does not mean any of the proposed sites should not be built. Certainly there are many people in the remote areas where there is no road access or availability of water and electricity who all deserve access to basic health care. As the EHIP program moves forward, lessons learned at the "easier" sites can then be incorporated into the development of the more problematic sites.

Coordination with local authorities who have plans to develop water, electricity and improved road access to their communities will facilitate both the development of the communities and development of the Health Center. It became clear during the Preliminary Assessment activities that such coordination may enable the development of critical ancillary services at several of the proposed sites. Such coordination takes time, as will local progress on implementing infrastructure activities. Phasing of the program will allow Tetra Tech to proactively pursue development of sites at all three tiers while continuing to execute site adaptations and construction documents for the CRMS contractor. It is hoped that by the time the first-tier site adaptations are nearing completion, the second-tier sites will have been further prepared by the local authorities, and present a lower risk for development in the EHIP project.

For example, at Jaradado in SNNPR, there is a local water system in place, but it is not currently functional. The local water authority says they have fixed the pump, but the system is still not working, at least in Jaradado (the system apparently serves many villages). We have not listed Jaradado as a first-tier site mainly because there is no water available. Perhaps we will be able to work with the local authorities to identify the nature of the problem. Knowing what our plans are for the development of the Health Center site may give local authorities adequate incentive to repair the problem in a timely manner. It is expected that it will take some time to initiate this type of coordination and determine whether the local water authority will be able to repair the system or if additional inputs will be required. Due to the time necessary to initiate coordination activities at specific sites and the unknown nature of the solutions that will be the result of such coordination, second- and third-tier sites should be addressed subsequent to the first-tier sites.

Appendix A

(insert map of 92 sites)
(insert map of First-Tier sites)

Appendix B

(insert PSA summary table, 5 pages)

Appendix C

(insert full PSA reports of 15 prioitized sites, 90 pages)

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